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10/582,435

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EXAMINER

ABDALLA, KHALID M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,435	Applicant(s) CRUZ, RENE L.	
	Examiner KHALID ABDALLA	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/09/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 22-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding the device in claims (22-27) and the methods in claims (1-21) fails to fall within a statutory category of invention they are directed to a software logic which is non- statutory subject matter. A device or system implemented in software renders the claimed device/system non-statutory as being directed to software per se. Thus, claims 22-27 are rejected as such.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al (US PTN 6119162) in view of Vange (US 20020002618 A1) hereinafter referred to as Li and Vange respectively.

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Regarding claim 1, Li discloses a method for providing shared communication resource access (proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-5 and FIG 1), the method comprising steps of:

establishing a network of clients, wherein at least a plurality of the clients (LAN 10 includes plurality of computers see FIG 1) in the network of clients have a their own associated communication resource connection; providing a communication protocol between the network of clients ; providing a protocol for sharing the communication resource connections of the at least some of the clients to the network of clients (some of computers 12 may be connected to ISP 16 through, for example, a cable line, while others of computers 12 are connected to ISP 16 through public telephone lines 18. Other configurations having multiple public telephone lines may also be used col: 5 lines 59 -67).

Li does not discloses spreading communications from a client in the network of clients among the communication resource connections of the at least a plurality of the clients in the network. However Vange teaches spreading communications from a client in the network of clients among the communication resource connections (all communication entering and leaving the last-mile interface goes through the associated front-end server see [0022],[0020], [0032] and FIG2) of the at least a plurality of the clients (plurality of end-users see[0017] and [0018]) in the network.

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Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use and modify the disclosure of Li and combine it with the end - user front-end server taught by Vange in order to exchange data within the network.

Regarding claim 2, note that Li discloses wherein the communication protocol between the network comprises a wireless protocol that is implemented via a wireless medium (LAN 10 on FIG 1 could also comprise connections made via power lines, telephone lines, wireless connections made via infrared or RF transmission or any other type of network connection see col: 6 line 8-14).

Regarding claim 3, note that Li discloses the method , wherein the communication resource access comprises Interact access and the communication resource connections of the network of clients comprise Internet access connections (the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-5 and FIG 1) .

Regarding claim 4, note that Li discloses the method, wherein the network of clients comprises a wireless community (LAN 10 on FIG 1 could also comprise connections made via power lines, telephone lines, wireless connections made via infrared or RF transmission or any other type of network connection see col: 6 line 8-14)

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Regarding claim 5, note that Vange teaches the method of, wherein said steps of providing a protocol for sharing comprises:

accepting client session requests for a session with a device outside of the network of clients; and

providing a proxy between the device outside of the network of clients and a client requesting a client session (The front-end server implements a mechanism for discriminating between request and/or response packets communicated with the last-mile see[0020]).

Regarding claim 6, note that Vange teaches the method, wherein said step of spreading comprises choosing one of the Internet access, connections based upon usage patterns (Client traffic is dynamically directed to available front-ends 201 to provide load balancing see[0042], FIG2 and efficient transport and traffic prioritization see [0037] and [0039]).

Regarding claim 7, note that vange teaches the method wherein said step Of choosing is conducted on a packet basis (prioritization performed by a front-end server located at the edge of the network. The front-end server is coupled to communicate data, typically in the form of IP packets, with an interface to the last-mile see [0020]).

Regarding claim 8, note that vange teaches the method, wherein said step of choosing is conducted on a session basis (client requests directed to the newly assigned front-end 201 to distribute traffic across a broader base see [0042] and FIG2).

Regarding claim 9, note that Li discloses the method, wherein said step of providing a proxy is implemented by a device within the network of clients (proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-11 and FIG 1).

Regarding claim 10, note that Vange teaches the method, wherein said step of providing a proxy is implemented by a device outside the network of clients (The front-end server implements a mechanism for discriminating between request and/or response packets communicated with the last-mile see[0020]).

Regarding claim 11, not that Li discloses the method of, wherein said step of providing a proxy is implemented by a device accessed through the Internet (proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-11 and FIG 1).

Regarding claim 12, not that Li discloses the method, wherein said step of providing a proxy is implemented by a device within an Internet service provider that serves the network of clients(proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-11 and FIG 1).

Regarding claim 13 Li discloses a method for providing shared Internet access (proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-5 and FIG 1).

Li does not disclose pooling the Internet access connections of a community of clients into a resource available for bursts of traffics to a client in the community of clients by a network medium and protocol shared among the groups of clients; and dividing bursts of traffic to or from a client of the community of clients across the Internet access connections created by said step of pooling.

However Vange teaches pooling the Internet access connections of a community of clients into a resource available for bursts of traffics to a client in the community of clients by a network medium and protocol shared among the groups of clients; and dividing bursts of traffic (Client traffic is dynamically directed to available front-ends 201 to provide load balancing see[0042]) to or from a client of the community of clients across the Internet access connections created by said step of pooling

(a redirection mechanism is enabled to select from a pool of available front-end servers and client request-response traffic is conducted through the selected front-end server see [0022]). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use and modify the disclosure of Li and couple it with the pool of available front-end servers taught by Vange in order to load balance the traffic across the network.

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Regarding claim 14, note that Li discloses the method, wherein the community of clients comprises a local wireless area network (LAN 10 on FIG 1 could also comprise connections made via power lines, telephone lines, wireless connections made via infrared or RF transmission or any other type of network connection see col: 6 line 8-14)

Regarding claim 15, Li discloses the method, further comprising steps of: accepting client session requests for a session with a device outside of the community of clients; and providing a proxy between the device outside of the network of clients and a client requesting a client session (The proxy server software then sends the request to the appropriate place on the Internet see col:2 lines 33-39).

Regarding claim 16, note that Vange teaches the method, wherein said step of dividing comprises choosing one of the Internet access connections based upon usage patterns (Client traffic is dynamically directed to available front-ends 201 to provide load balancing see [0042], FIG 2 and efficient transport and traffic prioritization see [0037] and [0039]).

Regarding claim 17, note that Vange teaches the method, wherein said step of choosing is conducted on a packet basis (prioritization performed by a front-end server

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located at the edge of the network. The front-end server is coupled to communicate data, typically in the form of IP packets, with an interface to the last-mile see [0020]).

Regarding claim 18, note that the method, wherein said step of choosing is conducted on a session basis (client requests directed to the newly assigned front-end 201 to distribute traffic across a broader base see [0042] and FIG2).

Regarding claim 19, note that Li discloses the method, wherein said step of providing a proxy is implemented by a device within the network of clients (computers on the LAN are configured to send their requests to the proxy server software running on one particular computer on the network. the proxy server software then sends the request to the appropriate place on the Interact, receives any response, and sends the response back to the appropriate computer on the LAN see col: 2 lines 32-37).

Regarding claim 20, note that Li discloses the, wherein said step of providing a proxy is implemented by a device outside the community of clients (computers on the LAN are configured to send their requests to the proxy server software running on one particular computer on the network. The proxy server software then sends the request to the appropriate place on the Interact, receives any response, and sends the response back to the appropriate computer on the LAN see col: 2 lines 32-37).

Regarding claim 21, note that Li discloses the method, wherein said step of providing a proxy is implemented by a device accessed through the Internet (proxy server software permits all of the computers on LAN 10 to share public telephone line 18 and access ISP see col:5 line 1-5 and FIG 1).

Regarding claim 22, Li discloses a gateway device implemented in software or hardware the gateway software usually is installed on one of computers 12, which then functions as a designated server see col:5 lines 3-5) that performs steps of:

redirecting requests from a client of the gateway device to a proxy (All of the other computers are configured to route any traffic to the Internet through the designated server containing the gateway software see col:5 line 5-7).

Li does not disclose maintaining communications with other gateway devices in a client community via a medium utilized by the community participating in selecting from among a plurality of communication resources in the community.

However Vange teaches maintaining communications with other gateway devices in a client community via a medium (wireless interface e.g. component 215 FIG2) utilized by the community participating in selecting from among a plurality of communication resources in the community (the front-end server 201 handles communication with originating servers or other network servers that contain the information and resources that are the subject of each request see [0023] and FIG2). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use and

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modify the disclosure of Li and couple it with the front-end servers and the redirection mechanism taught by Vange in order to exchange information.

Regarding claim 23, note that Li discloses the gateway device, wherein the communication resources comprise Internet access resources (Fig. 1, the computers of LAN 10 access the internet via the public lines 18).

Regarding claim 24, note that Li discloses the gateway device, wherein the gateway device further performs the step of forwarding packets for other clients in the community to an appropriate gateway device in the community (Fig. 1, a server is selected among a plurality, of computers in a LAN, therefore, packets from other computers to be transmitted are forwarded to the selected server).

Regarding claim 25, note that Vange teaches the gateway device of claim 22, wherein the plurality of communication resources comprises separate communication resource accounts of clients in the community of clients (the front-end server 201 handles communication with originating servers or other network servers that contain the information and resources that are the subject of each request see [0023] and FIG.2).

Regarding claim 26, note that Li discloses the gateway device, wherein the separate communication resource accounts of clients comprise separate Internet access

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accounts (some of computers 12 may be connected to ISP 16 through, for example, a cable line, while others of computers 12 are connected to ISP 16 through public telephone lines 18. Other configurations having multiple public telephone lines may also be used see col: 5 lines 59-64).

Regarding claim 27, note that Vange teaches a remote proxy server to receive redirected requests from a gateway device in accordance with claim 22 (the front-end server 201 handles communication with originating servers or other network servers that contain the information and resources that are the subject of each request see [0023] and FIG2)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-PAT-NO 5956490, (Buchholz et al) discloses Method, client device, server and computer readable medium for specifying and negotiating compression of uniform resource identifiers.

US-PAT-NO 5918019 ,(Valencia) discloses Virtual dial-up protocol for network communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is (571)270-7526. The examiner can normally be reached on MONDAY THROUGH EVERY OTHER FRIDAY 7 AM TO 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JINHEE LEE can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A./

Examiner, Art Unit 4173

/Yemane Mesfin/
Examiner, Art Unit 2444

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